

## CLAIMS

What is claimed is:

1. A service broker for processing data from a data network including at least one data source, comprising:

a first communication module for initiating communication with a moderator and adapted to receive data from the moderator;

a second communication module for sending data to at least one of the data source and the moderator;

a service-action module for processing the received data and for performing a task based on the processed data; and

an export module in communication with the service-action module and for publishing data based at least in part on the performed task to the data network.

2. The service broker according to claim 1, wherein the published data is published to at least one of the data source and the moderator.

3. The service broker according to claim 1, wherein the moderator includes a data store and the first communication module receives data from the data store.

4. The service broker according to claim 3, wherein the data store stores data received from the at least one data source.

5. The service broker according to claim 3, wherein the data store is a command queue and the data received from the data source is a command which is intended to be processed

by the service-action module, the first communication module receiving the command from the queue.

6. The service broker according to claim 1, wherein the first communication module communicates with the moderator via the HTTP protocol.

7. The service broker according to claim 4, wherein the data source communicates with the moderator via the HTTP protocol.

8. The service broker according to claim 1, wherein the performed task comprises communicating a command based at least in part on the processed data to a device connected to the service broker.

9. The service broker according to claim 1, wherein at least one of the moderator and the data source comprises a virtual representation of the service broker and wherein the published data updates the virtual representation.

10. The service broker according to claim 8, wherein at least one of the moderator and the data source comprises a virtual representation of the connected device and wherein the published data updates the virtual representation.

11. A method for transferring data from a data source to a service broker comprising the steps of:

providing a data source and a service broker; providing a moderator for receiving the data transferred by the data source; providing a data store for storing data received by the moderator; providing a communications module for transferring data from the data store; providing a virtual representation of the service broker on the data source;

transferring data from the data source to the moderator, the data sent being related to or associated with the virtual representation;

storing the data received by the moderator in the data store;  
retrieving the data from the data store via the communications module and forwarding the data to the service broker; and updating the virtual representation when the service broker receives the data sent by the data source, whereby data is transferred between the data source and to the service broker.

12. The method according to claim 11, wherein the data transferred from the data source to the moderator is performed using the HTTP protocol.

13. The method according to claim 11, wherein the data transferred from the moderator to the service broker is performed via the HTTP protocol.

14. The method according to claim 12, wherein the data is transferred using name/value pairs.

15. The method according to claim 13, wherein the data is transferred using name/value pairs.

16. The method according to claim 14, wherein the name/value pair is transmitted using a field/value abstraction layer.

17. The method according to claim 15, wherein the name/value pair is transmitted using a field/value abstraction layer.

18. The method according to claim 11, wherein the data is a command for changing the state of the service broker and wherein the virtual representation is updated when the state of the service broker is changed.

19. The method according to claim 11, wherein the data sent is a command for changing the state of the service broker.

20. The method according to claim 11, wherein the moderator and the data store are the same entity.

21. The method according to claim 11, wherein the data store and the communications module are the same device.

22. The method according to claim 11, wherein the moderator, data store, and the communications module are the same entity.

23. The method according to claim 11, wherein there are a plurality of data stores.

24. The method according to claim 11, wherein there are a plurality of service brokers.

25. The method according to claim 11, wherein there are a plurality of moderators and data stores.

26. The method according to claim 11, wherein the data source and the service broker are at the same node.

27. The method according to claim 11, wherein the data store is a queue of commands.

28. The method according to claim 11, wherein the data transferred from the data store to the service broker is initiated by the service broker.

29. The method according to claim 11, wherein the data is retrieved by specifying a specific device identifier.

30. The method according to claim 11, wherein at least one device is connected to the service broker and wherein the command is received by the service broker and forwarded to the at least one connected device.

31. The service broker according to claim 1, wherein the first communication module is capable of handling a device identifier.

32. The service broker according to claim 1, wherein the first communication module is capable of handling a class of device identifiers.

33. The service broker according to claim 1, wherein the virtual representation comprises a mapped control, group of controls, or user interface.